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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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|-----------------|-------------|----------------------|---------------------|

09/595,227 06/16/00 FANG

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EXAMINER

SHAKERI, H

ART UNIT

PAPER NUMBER

3723

DATE MAILED:

09/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/595,227

Applicant(s)

FANG ET AL.

Examiner

Hadi Shakeri

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 01 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-23 and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, "the surface of a memory..." line 1, lacks sufficient antecedent basis.

Regarding claims 17-19, "the phosphate ion", claim 17, line 1, lacks antecedent basis, i.e., for the embodiments comprising phosphonate ion. Applicant may wish to depend claim 17 from claim 2.

Regarding claim 19, "the source" line 1 lacks sufficient antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-3, 5-10, 12-14 and 17-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Huynh et al., US Patent No. 6,190,237.

Art Unit: 3723

Huynh et al. discloses all the limitations of claims 1-3, i.e., a slurry containing water, an oxidizing agent, abrasive material and higher than 0.04M, col. 2, lines 15-20, phosphate ion or phosphonate ion, col. 2, lines 60-67.

Regarding claims 5 and 6, PA meets the limitations, i.e., Figs. 1 and 2.

Regarding claims 7-10, PA meets the limitations, col. 2, lines 39-46.

Regarding claims 12-14, PA meets the limitations, col. 3, line 62.

Regarding claims 17-21, PA meets the limitations, col. 2, lines 60-67, and col. 3, lines 1-3.

Regarding claims 22 and 23, PA meets the limitations, col. 2, lines 15-22.

Regarding claims 7-10, PA meets the limitations, col. 2, lines 39-46.

Regarding claims 24, 25 and 27, PA meets the limitations. Regarding claim 26, intended use and limitations in the preamble and given to the workpiece are not given patentable weight.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huynh et al., US Patent No. 6,190,237 in view of Chopra, US Patent No. 6,276,996.

Regarding claim 4, Huynh et al. (PA) discloses all the limitations of claim 4, except for specifically disclosing the use of the slurry for nickel-phosphorus surfaces. PA teaches the use of the slurry for metal surfaces, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the method of PA to nickel-phosphorus dependent on work-piece parameters.

7. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huynh et al., US Patent No. 6,190,237 in view of Chopra, US Patent No. 6,276,996.

Huynh et al. as discussed above meets all the limitations of claim 11, except for disclosing the use of fixed abrasives. Chopra teaches a fixed abrasive pad. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the abrasive material of Huynh et al. with the use of fixed abrasive pad as taught by Chopra to modify the method of Huynh et al. for the use with a fixed abrasive pad.

8. Claims 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huynh et al. in view of Ishitobi et al., US Patent No. 6,152,976.

PA discloses all the limitations of the above claims, except for weight percentage of the oxidizing agent (0.1 to 5 molar). Ishitobi et al. teaches an abrasive composition with oxidizing agents greater than 0.01 wt.%. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the composition of Huynh et al. with the weight percent of oxidizer as taught by Ishitobi et al. for a better abrading action, Ishitobi et al., col. 5, line 24.

Art Unit: 3723

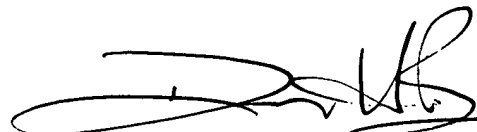
Conclusion

9. Prior art made of record and not relied upon are considered pertinent to applicant's disclosure. Muroyama, Earl et al., Harmer et al., Farkas et al., Perry, Haisma et al., Swidler et al., Payne and Rader et al. are cited to show related inventions.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hadi Shakeri at (703) 308-6279, FAX (703) 746-3279 for unofficial documents. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1148.

HS


DERRIS H. BANKS
PRIMARY EXAMINER

September 12, 2001

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.